

aiwa



AIWA -03502

COMPACT DISC STEREO SYSTEM
SISTEMA ESTEREO CON REPRODUCTOR DE DISCOS COMPACTOS
CHAINE STEREO AVEC LECTEUR DE DISQUES COMPACTS

XR-MT100

OPERATING INSTRUCTIONS
MANUAL DE INSTRUCCIONES
MODE D'EMPLOI

En (English)

E (Español)

F (Français)

For assistance and information

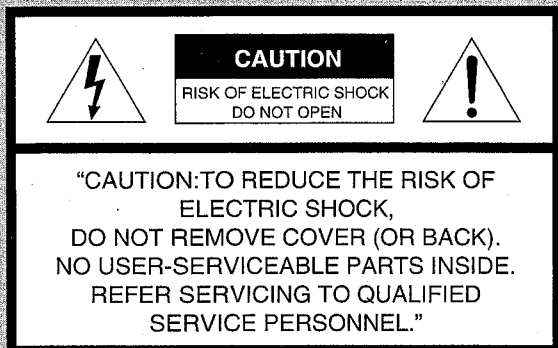
call toll free 1-800-BUY-AIWA

(United States and Puerto Rico)

COMPACT
disc
DIGITAL AUDIO

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



Explanation of Graphical Symbols:



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Owner's record

For your convenience, record the model number and serial number (you will find them on the rear of your set) in the space provided below. Please refer to them when you contact your Aiwa dealer in case of difficulty.

Model No.	Serial No. (Lot No.)
RX-NMT100	
FD-NM100	
SX-NMT100	
SX-C600	
SX-R270	

PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

- Water and moisture** — Do not use this unit near water, such as near a bathtub, washbowl, swimming pool, or the like.
- Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
- Mounting surface** — Place the unit on a flat, even surface.
- Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from the each side.
 - Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
 - Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.
- Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
- Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
- Condensation** — Moisture may form on the CD pickup lens when:
 - The unit is moved from a cold spot to a warm spot
 - The heating system has just been turned on
 - The unit is used in a very humid room
 - The unit is cooled by an air conditioner
 When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
- Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.



Electric Power

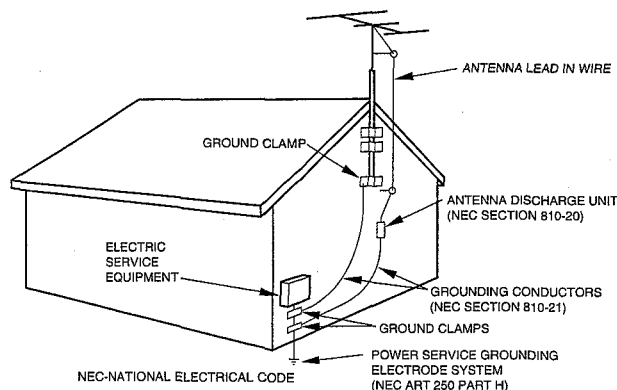
- Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
- Polarization** — As a safety feature, some units are equipped with polarized AC power plugs which can only be inserted one way into a power outlet. If it is difficult or impossible to insert the AC power plug into an outlet, turn the plug over and try again. If it still does not easily insert into the outlet, please call a qualified service technician to service or replace the outlet. To avoid defeating the safety feature of the polarized plug, do not force it into a power outlet.
- AC power cord**
 - When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
 - Never handle the AC power plug with wet hands, as this could result in fire or shock.
 - Power cords should be routed to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
 - Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.

- 4 **Extension cord** — To help prevent electric shock, do not use a polarized AC power plug with an extension cord, receptacle, or other outlet unless the polarized plug can be completely inserted to prevent exposure of the blades of the plug.
- 5 **When not in use** — Unplug the AC power cord from the AC power plug if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Outdoor Antenna

- 1 **Power lines** — When connecting an outdoor antenna, make sure it is located away from power lines.
- 2 **Outdoor antenna grounding** — Be sure the antenna system is properly grounded to provide protection against unexpected voltage surges or static electricity build-up. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information on proper grounding of the mast, supporting structure, and the lead-in wire to the antenna discharge unit, as well as the size of the grounding unit, connection to grounding terminals, and requirements for grounding terminals themselves.

Antenna Grounding According to the National Electrical Code



Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the units serviced by a qualified service technician if:

- The AC power cord or plug has been damaged
 - Foreign objects or liquid have gotten inside the unit
 - The unit has been exposed to rain or water
 - The unit does not seem to operate normally
 - The unit exhibits a marked change in performance
 - The unit has been dropped, or the cabinet has been damaged
- DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

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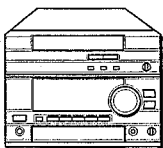
SETTING UP

The Dolby Pro Logic system which is the biggest feature of this stereo system provides you with multi channel sound in your home.

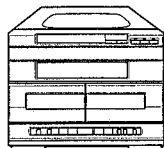
Complete setting and connection of the main unit, supplied speakers, your TV and video equipment according to the following procedure.

Check your system and accessories

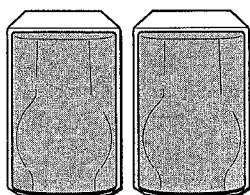
RX-NMT100
Stereo receiver



FD-NM100
Stereo cassette deck/
compact disc player



SX-NMT100
Front speakers



SX-C600
Center speaker



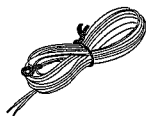
SX-R270
Surround speakers



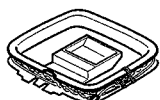
Remote control



FM antenna



AM antenna

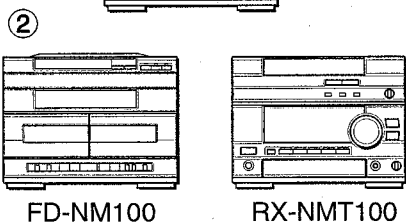
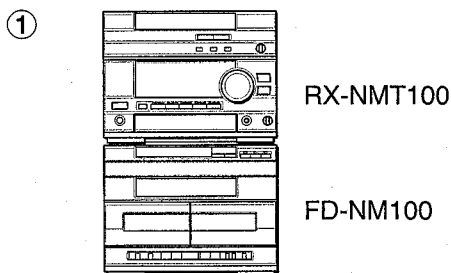


Operating Instructions, etc.

Placement

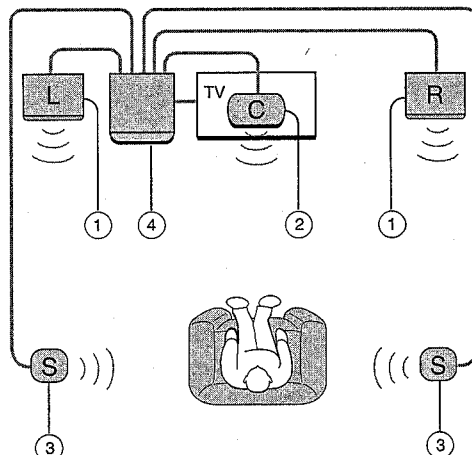
Two ways of placement are recommended.

- ① Vertical placement
- ② Horizontal placement



POSITIONING THE SPEAKERS

To achieve the optimum effects obtainable with the Dolby Pro Logic system, it is important to position the speakers properly. Refer to the following illustration to find out the best location in your room.



① Front speakers

② Center speaker

Position in the center of the two front speakers. In addition, position on or below the TV set, if connecting a TV set to the unit.

③ Surround speakers

Place the surround speakers directly to the side of or slightly behind the listening area. Align them horizontally, about 1 meter (3.2 feet) above ear height.

④ Center units

NOTE

- No sound is heard from the center and surround speakers when the Dolby Pro Logic and SURROUND are set to off.
- The center speaker sounds only when the Dolby Pro Logic is set to on.

CONNECTIONS

Before connecting the AC cord

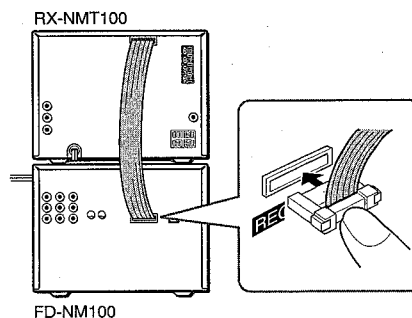
The rated voltage of your unit shown on the rear panel is 120 V AC. Check that the rated voltage matches your local voltage.

IMPORTANT

Connect the speakers, antennas, and all optional equipment first. Then connect the AC cord at the end.

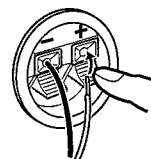
1 Connect the flat cable of the RX-NMT100 to the FD-NM100.

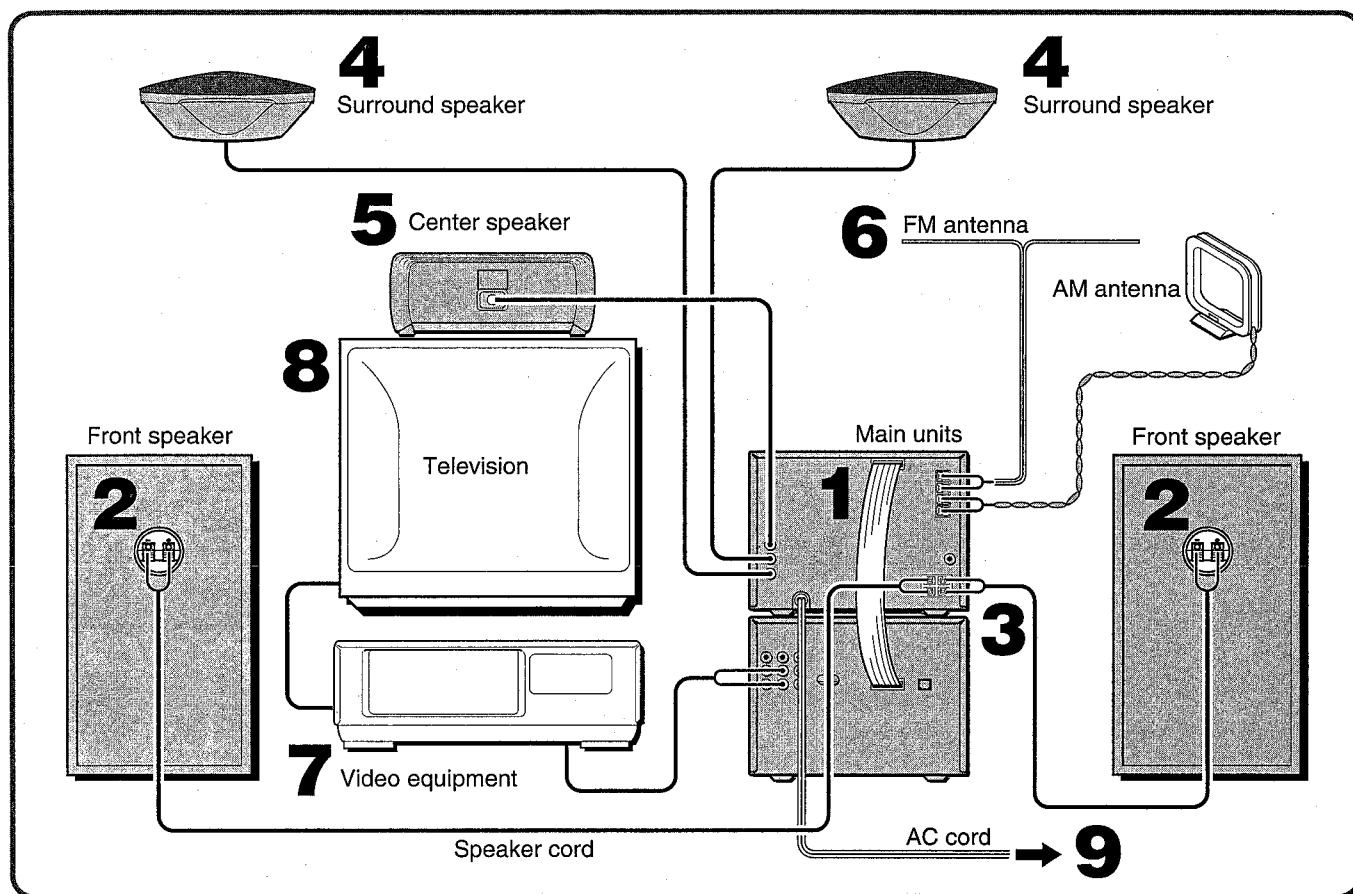
Push the connector in until it clicks.



2 Connect the speaker cords with the SX-NMT100.

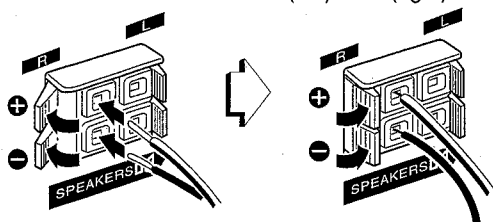
The cords with the white stripes should be connected to the ⊕ terminals and the other cords to the ● terminals.





3 Connect the right and left speakers to the RX-NM100.

Connect the right speaker cord to the SPEAKERS R terminals, and left to the SPEAKERS L terminals. There is no difference between the front speakers. Both speakers can be connected as L (left) or R (right).

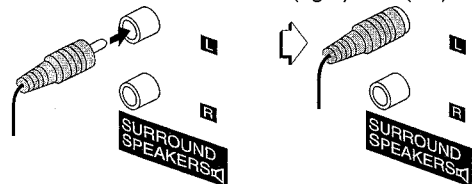


The speaker cord with the white stripe should be connected to the $\oplus$ terminal and the black cord to the $\ominus$ terminal.

4 Connect the surround speakers.

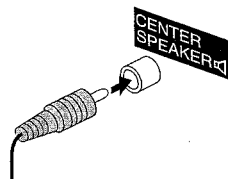
Connect the surround speaker cords to the SURROUND SPEAKERS terminals.

There is no difference between the surround speakers. Both speakers can be connected as R (right) or L (left).



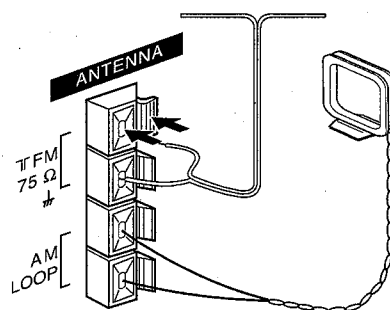
5 Connect the center speaker.

Connect the center speaker cord to the CENTER SPEAKER terminal.



6 Connect the supplied antennas.

Connect the FM antenna to the FM 75 Ω terminals and the AM antenna to the AM LOOP terminals.



7 Connect the video equipment.

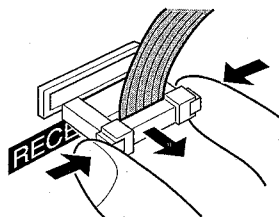
Connect the VIDEO 2/AUX jack of this unit to the audio output jack of the video equipment with an optional audio connecting cord.

8 Connect the Television to the video equipment.

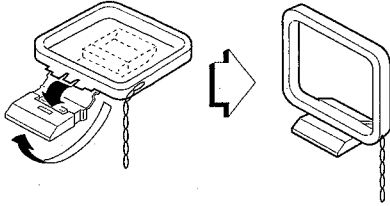
Refer to the Operating Instructions of the connected equipment for details.

9 Connect the AC cord to an AC outlet.

To unplug the connector of the flat cable
Press the tabs and pull out.



To stand the AM antenna on a surface
Fix the claw to the slot.



To position the antennas

FM feeder antenna:

Extend this antenna horizontally in a T-shape and fix its ends to the wall.

AM loop antenna:

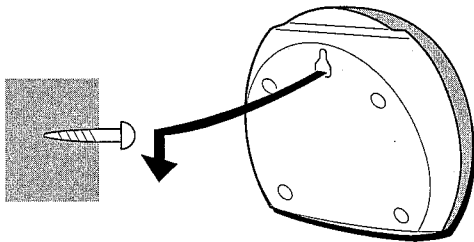
Position for the best reception.

NOTE

- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in the SPEAKERS terminals.
- Do not leave objects generating magnetism near the speakers.
- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the AM loop antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, as noise will be picked up.
- Do not unwind the AM loop antenna wire.

To mount the surround speakers on the wall

Mount each speaker on a spot that can hold its weight.



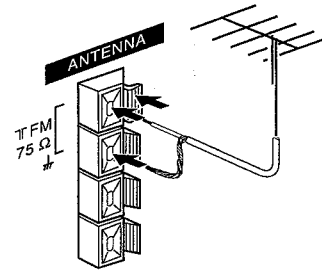
NOTE

Sound is not heard from the surround speakers when the SURROUND is set to off.

CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended.

Connect the outdoor antenna to the FM 75 Ω terminals.

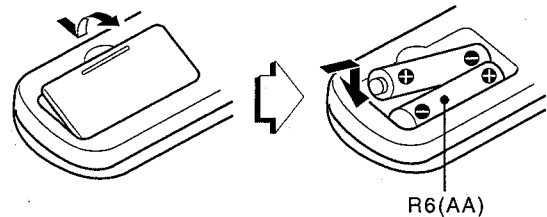


To connect other optional equipment → page 25.

REMOTE CONTROL

Inserting batteries

Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.



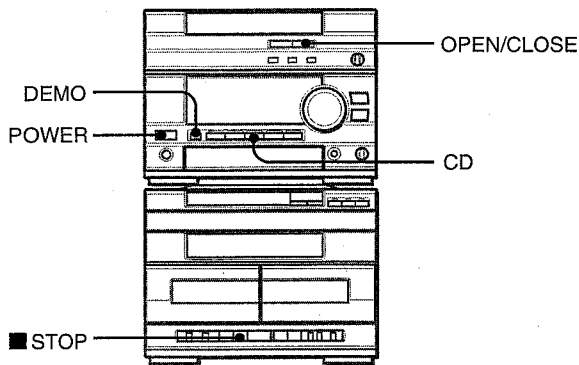
When to replace the batteries

The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 meters (16 feet). When this distance decreases, replace the batteries with new ones.

NOTE

- If the unit is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
 - The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight
 - Other remote controls are used nearby (television, etc.)

BEFORE OPERATION



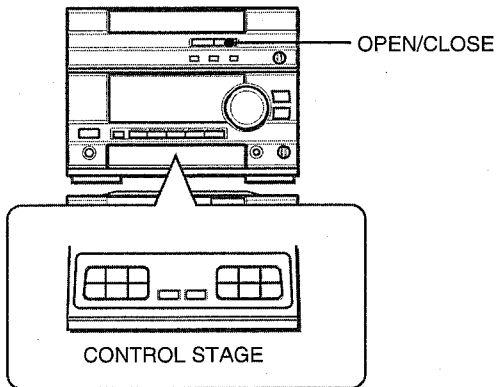
CONTROL STAGE

There is a retractable stage with control buttons on the amplifier.

To open the control stage

Press the OPEN/CLOSE button.

With the power off, pressing the OPEN/CLOSE button enables the unit to turn on, and the control stage to open.



To close the control stage

Press the OPEN/CLOSE button.

To turn the unit on

Press one of the function buttons (TAPE, TUNER, CD, VIDEO 1/MD, VIDEO 2/AUX).

Playback of the inserted disc or tape begins, or the previously tuned station is received (Direct Play Function).

The POWER button is also available.

The disc compartment may open and close to reset the unit.

DEMO (Demonstration) mode

When the AC cord is connected, the display window demonstrates the functions of the unit. When the power is turned on, the DEMO display is overridden by the operation display. When the power is turned off, the DEMO mode is restored.

To cancel DEMO mode

Press the DEMO button. The clock display appears. (To set the current time, see "SETTING THE CLOCK" on page 23.)

To re-activate the DEMO mode, press the DEMO button again.

Illumination guides

Whenever one of the function buttons is pressed, the selected button lights up.

Flash windows

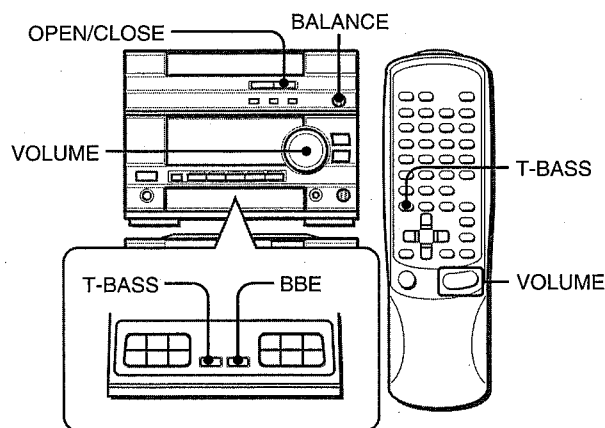
The window on the top of the disc compartment lights up or flashes while the unit is being powered on.

To turn off the light of the top window, press the CD button while pressing the ■ STOP button. To turn back on, repeat the above.

To turn the unit off

Press the POWER button.

AUDIO ADJUSTMENTS



Press the OPEN/CLOSE button to open the control stage if it is closed.

VOLUME

Turn the **VOLUME** control on the main unit, or press the **VOLUME** buttons on the remote control.

To change the left/right balance

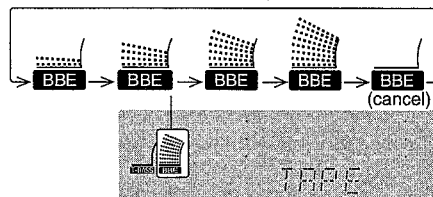
Turn the **BALANCE** control.

BBE SYSTEM

The BBE system enhances the clarity of high-frequency sound.

Press the BBE button.

Each time it is pressed, the level changes. Select one of the four levels, or the off position to suit your preference.



NOTE

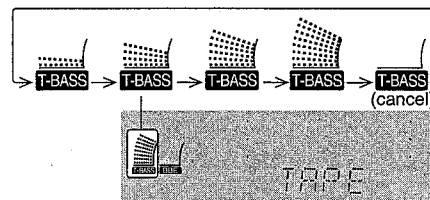
The BBE is automatically canceled when DOLBY PRO LOGIC is turned on.

SUPER T-BASS SYSTEM

The T-BASS system enhances the realism of low-frequency sound.

Press the T-BASS button.

Each time it is pressed, the level changes. Select one of the four levels, or the off position to suit your preference.



NOTE

Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.

SOUND ADJUSTMENT DURING RECORDING

The output volume and tone (except BBE) of the speakers or headphones may be freely varied without affecting the level of the recording.

Recording with BBE

The desired source can be recorded with the BBE system on to enhance the clarity of high-frequency sound. When playing back a tape recorded with BBE, it is recommended that BBE be set to off.

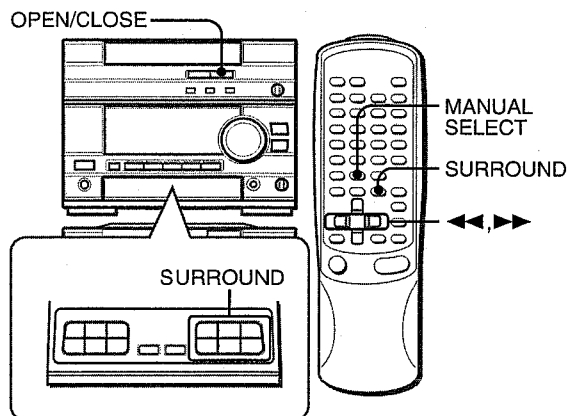
Using the headphones

Connect headphones to the PHONES jack with a stereo standard plug (ø6.3 mm, 1/4 inch).

No sound is output from the speakers while the headphones are plugged in.

DSP SURROUND SYSTEM

Press the OPEN/CLOSE button to open the control stage if it is closed.



The DSP (Digital Signal Processor) surround system can recreate the effect of sounds reflected from walls or ceilings. This system enhances 5 types of sound presence.

DISCO(ROCK): Little reverberation and medium range surround to resemble a disco.

LIVE(POP): Long reverberation and wide range surround to resemble a live stage.

HALL(JAZZ): Long reverberation and medium range surround to resemble a concert hall.

MOVIE(CLASSIC): Little reverberation and narrow range surround to resemble a movie theater.

ARENA(BGM): Long reverberation and low range surround to resemble to an arena.

Press one of the SURROUND buttons.

The indicator of the selected mode lights up, and the matching equalization curve appears on the display window.



When the music source is monaural

Select LIVE or MOVIE to obtain a simulated stereo effect. When DISCO, HALL or ARENA is selected, no sound will be heard from the surround speakers.

To cancel the selected mode

Press the OFF button so that SUR OFF appears on the display. While the SURROUND system is off, no sound is heard from the surround speakers.

To select with the remote control

Press the SURROUND button repeatedly until the desired SURROUND mode is displayed.

To adjust the volume of the surround speakers

Press the MANUAL SELECT button once on the remote control. "SUR" is displayed for 2 seconds. Press the ◀◀ DOWN or UP ▶▶ button on the remote control within these 2 seconds.

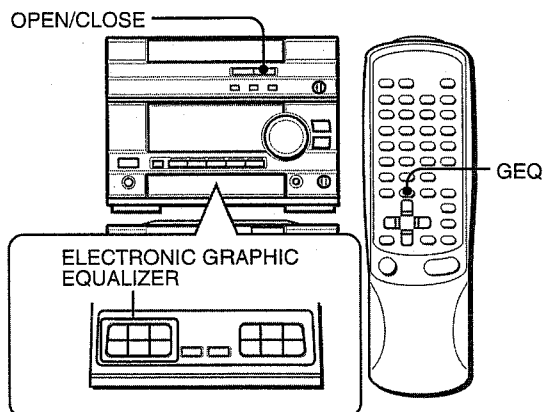
- The DOLBY PRO LOGIC surround speakers level is also changed. (See page 21.)

NOTE

- When there is audio input through a microphone, the DSP system is automatically canceled.
- When DOLBY PRO LOGIC is turned on, the DSP system is automatically canceled.
- When the headphones are connected, the DSP system is automatically canceled.

ELECTRONIC GRAPHIC EQUALIZER

Press the OPEN/CLOSE button to open the control stage if it is closed.



This unit provides the following five different equalization curves.

- ROCK:** Powerful sound emphasizing treble and bass
- POP:** More presence in the vocals and midrange
- JAZZ:** Accented lower frequencies for jazz-type music
- CLASSIC:** Enriched sound with heavy bass and fine treble
- BGM:** Calm tone with suppressed bass and treble

Press one of the **ELECTRONIC GRAPHIC EQUALIZER** buttons.

The indicator of the selected curve lights up, and the selected curve itself appears on the display window.



To cancel the selected mode

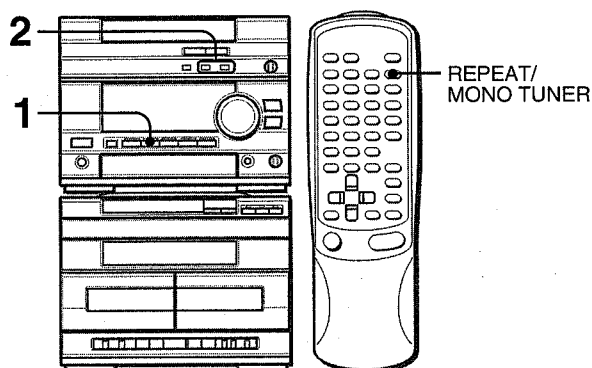
Press the OFF button so that "GEQ OFF" appears on the display.

To select with the remote control

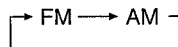
Press the GEQ button repeatedly until the desired equalization curve is displayed.

RADIO RECEPTION

MANUAL TUNING



- 1 Press the **TUNER** button repeatedly to select the desired band.



When the TUNER/BAND button is pressed while the power is off, the power is tuned on directly.

- 2 Press the **TUNING UP** or **DOWN** button to select a station.

Each time the button is pressed, the frequency changes. When a station is received, "TUNE" is displayed for 2 seconds. During FM stereo reception, ((I(0)I)) is displayed.



To search for a station quickly (Auto Search)

Keep the TUNING UP or DOWN button pressed until the tuner starts searching for a station. After tuning in to a station, the search stops.

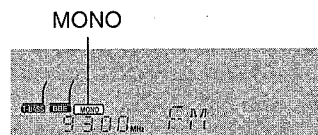
To stop the Auto Search manually, press the TUNING UP or DOWN button again.

- The Auto Search may not stop at stations with very weak signals.

When an FM stereo broadcast contains noise

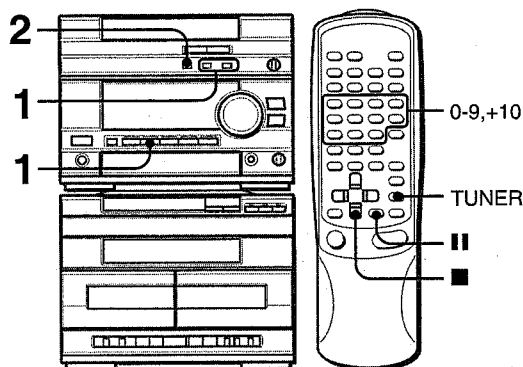
Press the REPEAT/MONO TUNER button so that "MONO" appears on the display.

Noise is reduced, although reception is monaural.



To restore stereo reception, press the REPEAT/MONO TUNER button so that MONO disappears.

PRESETTING STATIONS

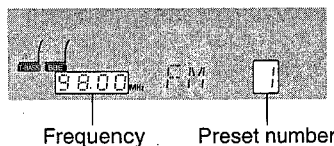


The unit can store a total of 32 preset stations. When a station is stored, a preset number is assigned to the station. Use the preset number to tune in to a preset station directly.

1 Press the TUNER button to select a band, and press the TUNING UP or DOWN button to select a station.

2 Press the SET button to store the station.

A station is assigned a preset number, beginning from 1 in consecutive order for each band.



3 Repeat steps 1 and 2.

The next station will not be stored if a total of 32 preset stations have already been stored for all the bands.

PRESET NUMBER TUNING

Use the remote control to select the preset number directly.

1 Press the TUNER button to select a band.

2 Press the numeric buttons to select a preset number.

Example:

To select preset number 25, press the +10, +10 and 5 buttons.

To select preset number 10, press the +10 and 0 buttons.

Selecting a preset number on the main unit

Press the TUNER button to select a band. Then, press the STATION PRESET UP or DOWN button repeatedly.

Each time the button is pressed, the following number is selected.

To clear a preset station

Use the remote control.

Select the preset number of the station to be cleared. Then, press the ■ CLEAR button, and press the ■ SET button within 4 seconds.

The preset numbers of all other stations in the band with higher numbers are also decreased by one.

To change the AM tuning interval

The default setting of the AM tuning interval is 10 kHz/step. If you use this unit in an area where the frequency allocation system is 9 kHz/step, change the tuning interval.

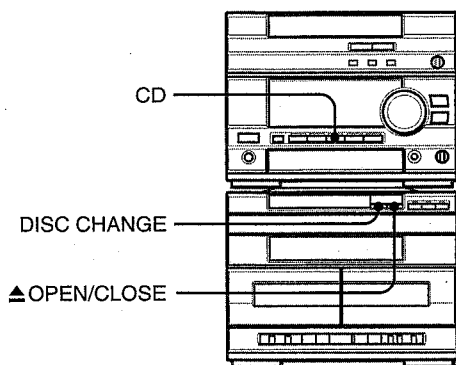
Press the POWER button while pressing the TUNER button.

To reset the interval, repeat this procedure.

NOTE

When the AM tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

BASIC OPERATIONS

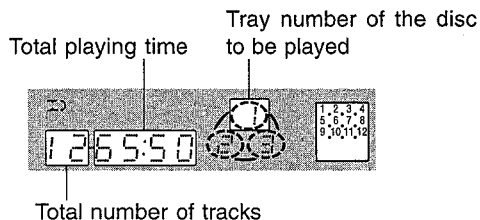
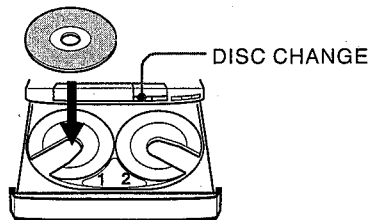


LOADING DISCS

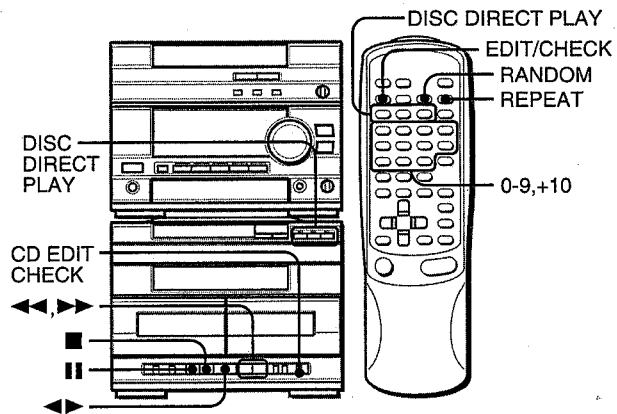
Press the CD button, then press the ▲ OPEN/CLOSE button to open the disc compartment. Load disc(s) with the label side up.

To play one or two discs, place the discs on tray 1 and 2.

To play three discs, press the DISC CHANGE button to rotate the trays after placing two discs. Place the third disc on tray 3. Close the disc compartment by pressing the ▲ OPEN/CLOSE button.



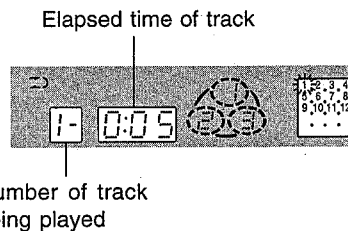
PLAYING DISCS



Load discs.

To play all discs in the disc compartment, press the ◀▶ button.

Play begins with the disc on tray 1.



To play one disc only, press one of the DISC DIRECT PLAY buttons.

The selected disc is played once.

To stop play, press the ■ button.

To pause play, press the || button. To resume play, press again.

To search for a particular point during play, keep the ◀◀ or ▶▶ button pressed and release the button at the desired point.

To skip to the beginning of a track during play, press the ◀◀ or ▶▶ button repeatedly.

To remove discs, press the ▲ OPEN/CLOSE button.

To start play when the power is off (Direct Play Function)

Press the CD button. The power is turned on and play of the loaded disc(s) begins.

When the **▲ OPEN/CLOSE** button is pressed, the power is also turned on.

To check the remaining time

Press the CD EDIT/CHECK button during play. The amount of time remaining until all tracks finish playing is displayed. To restore the play time display, repeat the above.

Selecting a track with the remote control

1 Press one of the DISC DIRECT PLAY buttons to select a disc.

2 Press the numeric buttons and the +10 button to select a track.

Example:

To select the 25th track, press the +10, +10 and 5 buttons.

To select the 10th track, press the +10 and 0 buttons.

The selected track starts to play and continues to the end of that disc.

Replacing discs during play

While one disc is playing, the other discs can be replaced without interrupting play.

1 Press the DISC CHANGE button.

2 Remove the discs and replace with other discs.

3 Press the **▲ OPEN/CLOSE** button to close the disc compartment.

NOTE

- When loading an 8-cm (3-inch) disc, put it onto the inner circle of the tray.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.

RANDOM PLAY

All the tracks on the selected disc or on all the discs can be played randomly.

Press the RANDOM button on the remote control.

RANDOM lights up on the display.

To cancel random play, press again.

To play all discs, press the **◀▶** button to start play.

To play a single disc, press one of the DISC DIRECT PLAY buttons to play.

NOTE

During random play, the following operations are not possible:

- to select the tracks directly with the numbered buttons.
- to skip to the previously played track with the **◀◀** button.

REPEAT PLAY

A single disc or all the discs can be played repeatedly.

Press the REPEAT button on the remote control.

↶ lights up on the display.

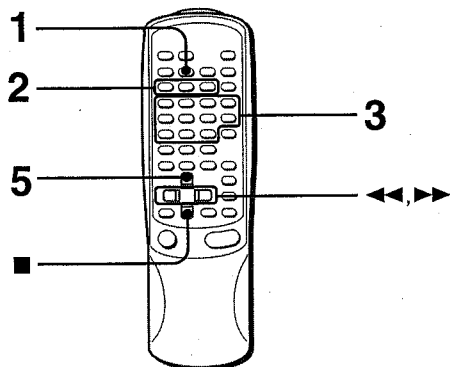
To cancel repeat play, press the REPEAT button again.

To play all discs, press the **◀▶** button to start play.

To play a single disc, press one of the DISC DIRECT PLAY buttons to start play.

PROGRAMMED PLAY I

Up to 30 tracks can be programmed from any of the inserted discs.



Use the remote control.

- 1 Press the PRGM button twice in stop mode.**
PRGM lights up on the display.



- When the PRGM button is pressed once in step 1, the unit enters the PROGRAMMED PLAY II.

- 2 Press one of the DISC DIRECT PLAY buttons to select a disc.**

The selected disc is indicated in red on the display.
Go to the next step when the tray stops rotating.

- 3 Press the numeric buttons and the +10 button to program a track.**

Example:

To select the 25th track, press the +10, +10 and 5 buttons.
To select the 10th track, press the +10 and 0 buttons.



Program number



Total playing time of the selected tracks

- 4 Repeat steps 2 and 3 to program other tracks.**
- 5 Press the ◀▶ button to start play.**

To check the program

Each time the ◀◀ or ▶▶ button is pressed in stop mode, a disc number, track number, and program number will be displayed.

To clear the program

Press the ■ CLEAR button in stop mode.

To add tracks to the program

Repeat steps 2 and 3 in stop mode. The track will be programmed after the last track.

To change the programmed tracks

Clear the program and repeat all the steps again.

To play the programmed tracks repeatedly

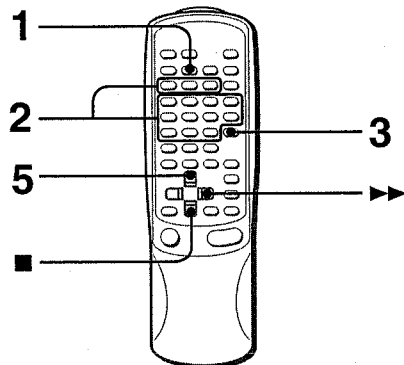
After programming the tracks, press the RANDOM/REPEAT button repeatedly until ↺ appears on the display.

NOTE

During programmed play, the CD EDIT/CHECK, DISC CHANGE, DISC DIRECT PLAY, RANDOM and numeric buttons do not function.

PROGRAMMED PLAY II

Before or during CD play, up to 9 tracks to be played after the current track can be programmed. Each program is cleared when it finishes playing.



Use the remote control.

1 Press the PRGM button once.

"PRGM" enclosed in parentheses lights up on the display.



2 Press one of the DISC DIRECT PLAY buttons to select a disc and the numeric buttons to select a track.

3 Press the ENTER button.



Programmed disc number Programmed track number

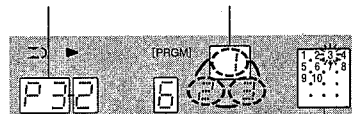
4 Repeat steps 2 and 3 to program other tracks.

5 Press the ◀▶ button to start play.

After a track is played, it is cleared from the program. Another track can be programmed in place of the cleared track.

Number of remaining
programmed track

Currently Playing disc



Disc number of the
last program

Track number of
the last program

Currently playing
track number flashes

6 Repeat steps 2 and 3 to add tracks to the program during play.

Up to 9 tracks can be programmed during play.

To check the programmed tracks

Press the EDIT/CHECK button repeatedly. Each time it is pressed, the disc number and track number are displayed in the programmed order.

To stop play

Press the ■ button. Press the ◀▶ button to start again.

To skip a track

Press the ▶▶ button. The skipped track is cleared from the program.

To clear the reprogram

Press the ▶▶ button repeatedly until "P0-" is displayed.

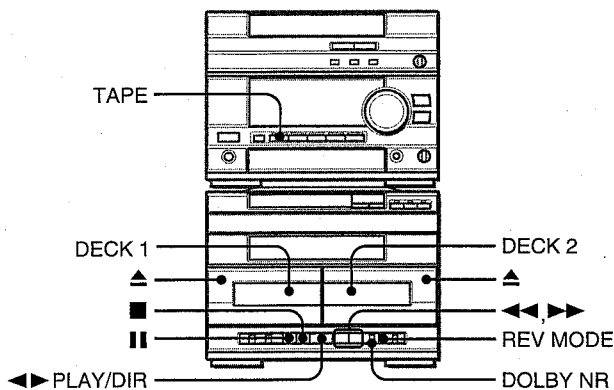


Press it once more to cancel program. The display returns to that of CD play.

NOTE

- If the reserved track number does not exist on the selected disc, the unit stops playing and the display flashes. In this case, press the ▶▶ button to skip the error track. Then press the ◀▶ button to start play with the next programmed track.
- When the PRGM button is pressed repeatedly in step 1, only PRGM is displayed and the unit enters PROGRAMMED PLAY I. To cancel it, press the ■ CLEAR button.

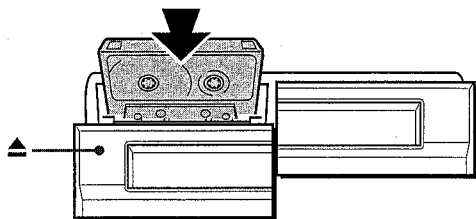
BASIC OPERATIONS



INSERTING TAPES

- On deck 1, tapes are always played back on both sides.
On deck 2, you can select a reverse mode to play back one or both sides.
- Use Type I (normal), Type II (high/CrO₂) or Type IV (metal) tapes for playback.

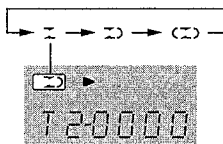
Press the **TAPE** button and press the **EJECT** mark to open the cassette holder.



Insert a tape with the exposed side down. Push the cassette holder to close.

To select a reverse mode (deck 2 only)

Each time the **REV MODE** button is pressed, the reverse mode changes.



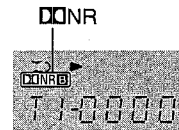
- To play one side only, turn on **I**.
- To play from front side to back side once only, turn on **II**.
- To play both sides repeatedly, turn on **III**.
- When tapes are loaded in both decks, **III** in the display indicates Continuous Play.

PLAYING BACK A TAPE

Insert a tape.

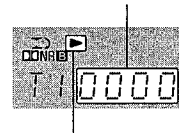
1 Press the **DOLBY NR** button and turn Dolby NR on or off to match the tape to be played.

For tapes recorded with DOLBY B NR, turn on **NR B**.
For tapes recorded with DOLBY C NR, turn on **NR C**.
For tapes recorded without DOLBY NR, turn off **NR**.



2 Press the **PLAY/DIR** button to start play.

The tape counter indicates the tape running length



Play back side of the tape

- ▶: The front side is being played (forward).
- ◀: The back side is being played (reverse).

When tapes are loaded in both decks

Press the **TAPE** button first to select a deck.
The selected deck number is displayed.

To stop play, press the **■** button.

To pause play (deck 2 only), press the **II** button. To resume play, press again.

To change the playback side, press the **PLAY/DIR** button in play or pause mode.

To fast forward or rewind, press the **◀◀** or **▶▶** button. Then press the **■** button to stop the tape.

To start play when the power is off (Direct Play Function)

Press the **TAPE** button. The power is turned on and play of the inserted tape begins.

To set the tape counter to 0000

Press the **■** button in stop mode.

The counter is also set to 0000 when the cassette holder is opened.

MUSIC SENSOR

If there is a 4-second or longer blank between each track, a search for the beginning of the current or next track during playback can be done easily.

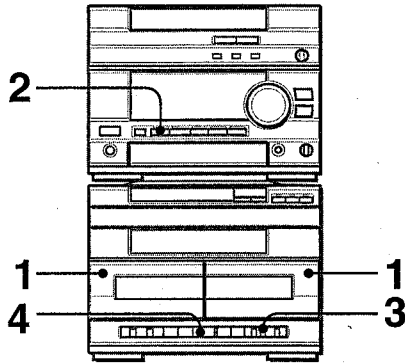
Press the **◀◀** or **▶▶** button during playback referring to the playback side indicator (◀ or ▶) on the display.

For example, when the **▶▶** button is pressed while ▶ is displayed, playback of the next track starts.

Music sensor function may not be able to detect tracks under the following conditions

- Blanks of less than 4 seconds between tracks
- Noisy blanks
- Long passages of low-end sound
- Low overall recording levels

CONTINUOUS PLAY

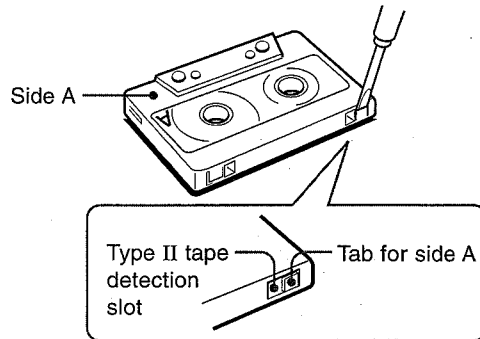


After playback on one deck finishes, the tape in the other deck will start to play without interruption.

- 1** Insert tapes into deck 1 and deck 2.
- 2** Press the **TAPE** button to select the deck to be played back first.
- 3** Press the **REV MODE** button to select $\curvearrowright$.
- 4** Press the $\blacktriangleleft \blacktriangleright$ button to start playback.
Playback continues until the $\blacksquare$ button is pressed.

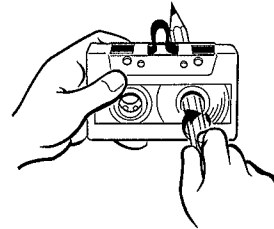
About cassette tapes

- To prevent accidental erasure, break off the plastic tabs on the cassette tape after recording with a screwdriver or other pointed tool.



To record on the tape again, cover the tab openings with adhesive tape, etc. (On Type II tapes, take care not to cover the Type II tape detection slot.)

- **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
- **Take up any slack in the tape** with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.

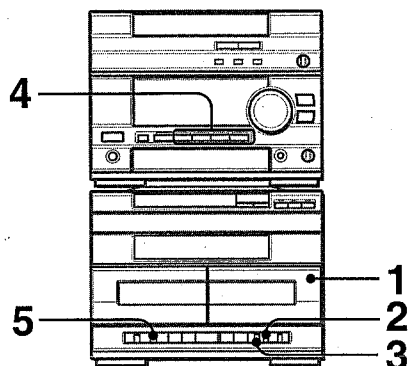


DOLBY NR system

The Dolby Noise Reduction system reduces tape hiss noise. For optimum performance when playing back a tape recorded with the DOLBY NR system, turn on the DOLBY NR system.

BASIC RECORDING

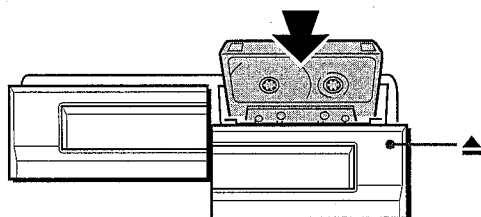
This section explains how to record from the tuner, CD player, or external equipment.



Preparation

- Set the tape to the point where recording will start.
- Use Type I (normal), Type II (high/CrO₂) and Type IV (metal) tapes for recording.

- 1 Insert the tape to be recorded on into deck 2.
Insert the tape with the side to be recorded on first facing out from the unit and the exposed side down.



- 2 Press the REV MODE button to select the reverse mode.

To record on one side only, turn on Σ .

To record on both sides, turn on Σ or Σ .

- 3 Press the DOLBY NR button to turn Dolby NR on or off.

For tapes recorded with DOLBY B NR, turn on Σ NR Σ .

For tapes recorded with DOLBY C NR, turn on Σ NR Σ .

For tapes recorded without DOLBY NR, turn off Σ NR.

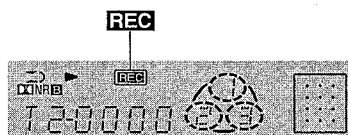
- 4 Press one of the function buttons and prepare the source to be recorded.

To record from a CD, press the CD button and load the disc(s).

To record from a radio broadcast, press the TUNER button and tune in to a station.

To record from a connected source, press the VIDEO 1/MD or VIDEO 2/AUX button and play.

- 5 Press the $\bullet$ REC/REC MUTE button to start recording.



When the selected function is CD, playback and recording start simultaneously.

To stop recording, press the $\blacksquare$ button.

To pause recording, press the || button. (Applicable when the source is TUNER, VIDEO 1/MD or VIDEO 2/AUX.) To resume recording, press again.

To start recording with the remote control

First press the $\bullet/\circ$ REC/REC MUTE button, and then press the $\blacktriangle$ button within 2 seconds.

INSERTING BLANK SPACES

Insertion of 4-second blank spaces enables activation of the Music Sensor function. (Applicable when the source is TUNER, VIDEO 1/MD or VIDEO 2/AUX.)

- 1 Press the $\bullet$ REC/REC MUTE button during recording or while in recording pause mode.

REC on the display flashes for 4 seconds and the tape runs without recording. After 4 seconds, the deck enters the recording pause mode.

- 2 Press the || button to resume recording.

To insert a blank space of less than 4 seconds, press the $\bullet$ REC/REC MUTE button again while **REC** is flashing.

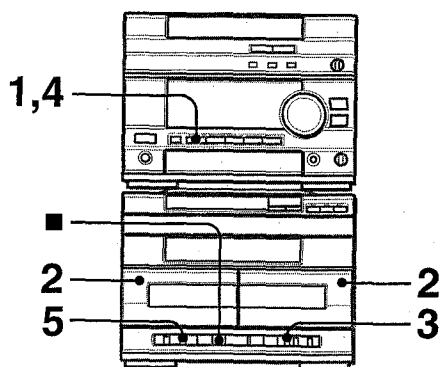
To insert blank spaces of more than 4 seconds, after the deck enters recording pause mode, press the $\bullet$ REC/REC MUTE button again. Each time the button is pressed, a 4-second blank space is added.

To erase a recording

Make sure the microphone is not connected to this unit.

- 1 Insert the tape to be erased into deck 2 and press the TAPE button to display "T 2".
- 2 Set the tape to the point where the erasure is to be started.
- 3 Set the reverse mode by pressing the REV MODE button.
- 4 Press the $\bullet$ REC/REC MUTE button to start the erasure.

DUBBING A TAPE MANUALLY



NOTE

- Set the tape to the point where recording will start.
- Note that recording will be done on one side of the tape only.

- 1 Press the **TAPE** button.
- 2 Insert the original tape into deck 1 and the tape to be recorded on into deck 2.
Insert the tapes with the sides to be played back or recorded on first facing out from the unit.
- 3 Press the **DOLBY NR** button to turn off the Dolby NR.
□□ NR B or C on the display goes out.
- 4 Press the **TAPE** button to select deck 1.
TAPE 1 is displayed.
- 5 Press the **● REC/REC MUTE** button to start recording.
Playing and recording start simultaneously.

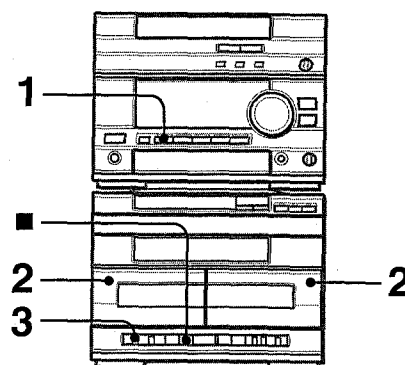
To stop dubbing

Press the **■** button.

To set the Dolby NR type when playing back the dubbed tape

Select the same DOLBY NR type as the original tape. For example, when DOLBY B NR has been used in the original tape, play back the dubbed tape with the DOLBY B NR.

DUBBING THE WHOLE TAPE



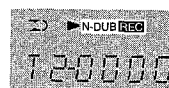
This function allows you to make exact copies of both sides of the original tape. The reverse side of both tapes will start simultaneously as soon as the longer tape has been reversed.

NOTE

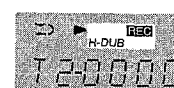
- Dubbing does not start from a point halfway in the tape.
- The reverse mode is automatically set to **↔**.
- The Dolby NR does not affect recording.

- 1 Press the **TAPE** button.
- 2 Insert the original tape into deck 1 and the tape to be recorded on into deck 2.
Insert each tape with the side to be played back or recorded on first facing out from the unit.
- 3 Press the **SYNC DUB** button once or twice to start recording.
 - ① For recording at normal speed, press it once to display N-DUB.
 - ② For recording at high speed, press it twice to display H-DUB.

①



②



The tapes are rewound to the beginning of the front sides, then recording starts.

To stop dubbing

Press the **■** button.

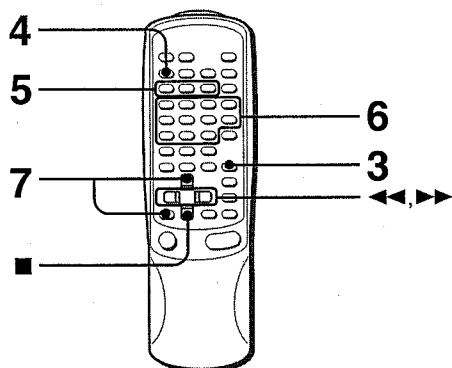
To set the Dolby NR type when playing back the dubbed tape

Select the same DOLBY NR type as the original tape. For example, when DOLBY B NR has been used in the original tape, play back the dubbed tape with the DOLBY B NR.

NOTE

Recording does not start, if the erasure prevention tab on either side of the tape is broken off.

AI EDIT RECORDING



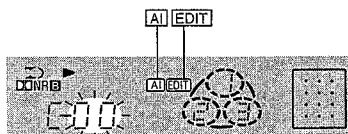
The AI edit function enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates track lengths. If necessary, the order of tracks is rearranged so that no track is cut short. (AI: Artificial Intelligence)

NOTE

AI edit recording will not start from a point halfway into the tape. The tape must be recorded from the beginning of either side.

Use the remote control from steps 3 to 7.

- 1 Insert the tape to be recorded on into deck 2.**
Insert the tape with the side to be recorded on first facing the foreground and the exposed side down.
- 2 Press the DOLBY NR button to turn Dolby NR on or off.**
To record with DOLBY B NR or DOLBY C NR, turn on **B** or **C**.
To record without DOLBY NR, turn off **NR**.
- 3 Press the CD button and load the disc(s).**
- 4 Press the EDIT/CHECK button once.**
"AI" and "EDIT" light up on the display.



When "PRGM" is displayed, press the EDIT/CHECK button again.

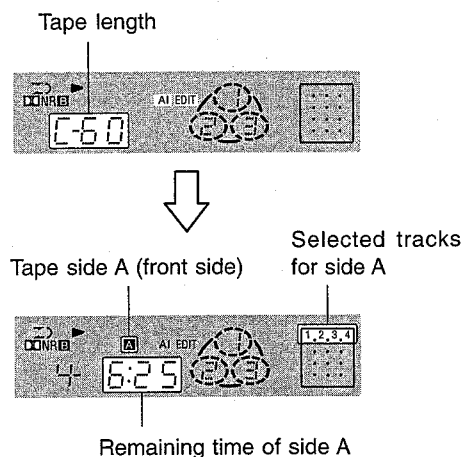
- 5 Press one of the DISC DIRECT PLAY buttons to select a disc.**
- 6 Press the numeric buttons to designate the tape length.**

10 to 99 minutes can be specified.

Example: When using a 60-minute tape, press the 6 and 0 buttons.

In a few seconds, the microcomputer determines the tracks to be recorded on each side of the tape.

- The **◀▶** and **▶▶** buttons are also available to designate the tape length.



- 7 First press the **●/○** REC/REC MUTE button and then press the **◀▶** button within 2 seconds to start recording.**

The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front (side A) ends, recording on the back (side B) starts.

To stop recording

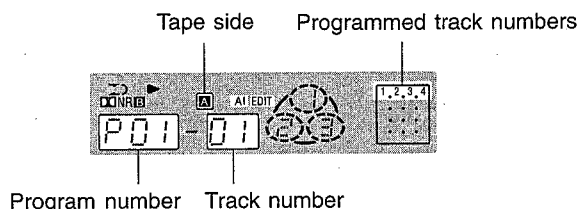
Press the **■** CLEAR button. Recording and CD play stop simultaneously.

To clear the edit program

Press the **■** CLEAR button twice so that "EDIT" disappears on the display.

To check the order of the programmed track numbers

Before recording, press the EDIT/CHECK button to select side A or B, and press the **◀▶** or **▶▶** button repeatedly.



To add tracks from other discs to the edit program

If there is any time remaining on the tape after step 6, you can add tracks from other discs in the CD compartment.

- 1** Press the EDIT/CHECK button to select side A or B.
- 2** Press one of the DISC DIRECT PLAY buttons to select a disc.
- 3** Press the numeric buttons to select tracks.
AI goes out and **PRGM** lights up on the display.
A track whose playing time is longer than the remaining time cannot be programmed.
- 4** Repeat steps 2 and 3 to add more tracks.

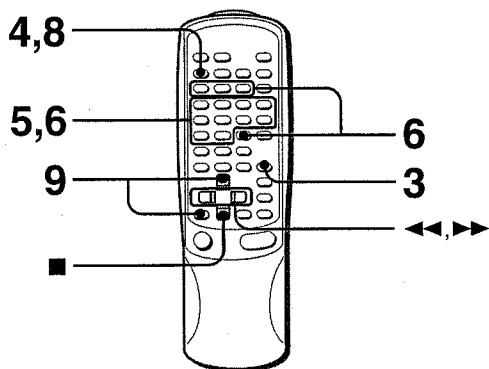
Time on cassette tapes and editing time

The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE

- Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.
- The AI edit function cannot be used with discs containing 31 tracks or more.

PROGRAMMED EDIT RECORDING



Programmed edit function enables CD recording while checking the remaining time on each side of the tape as the tracks are programmed.

NOTE

The programmed edit recording will not start from a point halfway in the tape. The tape must be recorded from the beginning of either side.

Use the remote control from steps 3 to 9.

1 Insert the tape to be recorded on into deck 2.

Insert the tape with the side to be recorded on first facing the foreground and the exposed side down.

2 Press the DOLBY NR button to turn Dolby NR on or off.

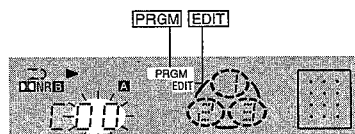
To record with DOLBY B NR or DOLBY C NR, turn on **B** or **C**.

To record without DOLBY NR, turn off **NR**.

3 Press the CD button and load the disc(s).

4 Press the EDIT/CHECK button twice.

"PRGM" and "EDIT" light up on the display.



When "A" is displayed, press the EDIT/CHECK button again.

5 Press the numeric buttons to designate the tape length.

10 to 99 minutes can be specified.

Example: When using a 60-minute tape, press the 6 and 0 buttons.



Tape length



Tape side A (front side)



Maximum recording time for side A

6 Press one of the DISC DIRECT PLAY buttons to select a disc and press the numeric buttons to program a track.

Example: To select the 10th track of disc 2, press DISC DIRECT PLAY 2 and the numeric buttons +10 and 0.

7 Repeat step 6 for the rest of the tracks for side A.

A track whose playing time is longer than the remaining time cannot be programmed.



Total number of programmed tracks



Remaining time of side A

Programmed tracks

8 Press the EDIT/CHECK button to select side B and program the tracks for side B.

After confirming B on the display, repeat step 6.

Total side B (reverse side)



9 Press the REC/REC MUTE button and then press the ◀▶ button within 2 seconds to start recording.

The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front side (A) ends, recording on the back side (B) starts.

To stop recording

Press the ■ button. Recording and CD play stop simultaneously.

To check the order of the programmed track numbers

Before recording, press the EDIT/CHECK button to select side A or B, and press the ◀▶ button repeatedly.

Program number



Track number

Programmed track number

To change the program of each side

Press the EDIT/CHECK button to select side A or B, and press the ■ CLEAR button to clear the program of the selected side. Then program tracks again.

To clear the edit program

Press the ■ CLEAR button twice so that "EDIT" disappears on the display.

NOTE

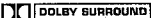
Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

DOLBY PRO LOGIC

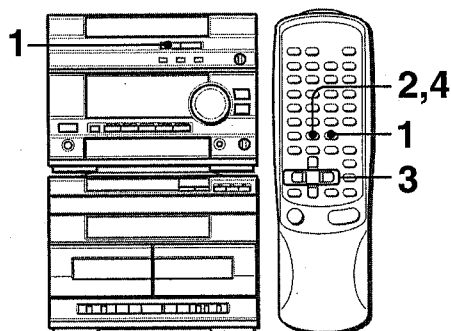
The DOLBY PRO LOGIC feature and the center and rear speakers (standard) assure full-scale home theater sound. When playing back laser discs or video software that have been recorded in Dolby Surround, astonishingly realistic sound surrounds the listener to create a new level of audio/visual entertainment.

Independent control of the four sound channels allows the listener to enjoy the same type of sound reproduction experienced in movie theaters. Voices are reproduced in the front and center sound field, while ambient sounds like cars and crowds are reproduced on all sides of the listener for an incredibly lifelike audio/video experience. Please read the following carefully to "tune" the system's output to match the characteristics of your listening space.

Check the following:

- Before using the DOLBY PRO LOGIC, adjust the proper balance of speaker sound levels.
- Make sure the supplied speakers are properly connected and positioned. (See page 4)
- Make sure the TV set and video unit are properly connected. (See page 4)
- Make sure the laser disc, video tape, etc., support .

ADJUSTING SPEAKER LEVEL BALANCE



The unit is equipped with a built-in test signal generator called a noise sequencer for easy balance adjustment of all four channels. The sequencer outputs a noise signal that "travels" from channel to channel, enabling the simple adjustment of sound level to achieve, at the listening position, the same apparent loudness from each channel.

Preparation

Balance the left and right speakers (page 7) before step 1 below.

Use the remote control.

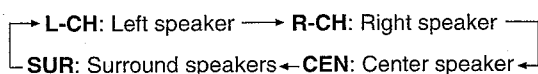
1 Press the DOLBY PRO LOGIC button to select NORMAL.

If PHANTOM or 3CH LOGIC appears, press the DOLBY PRO LOGIC button repeatedly until NORMAL is selected.

2 Press the MANUAL SELECT (TEST) button and hold it down for about four seconds until "L-CH" lights.



A noise signal is sent to each channel in turn in the following sequence.



3 Adjust the sound level of the center and the surround speakers.

While "CEN" or "SUR" is displayed, press the ◀◀ DOWN or UP ▶▶ button to adjust the volume of the center or surround speakers to match the level of the left and right speakers.

To adjust the balance between the left and right speakers, use the BALANCE control while "L" or "R" is displayed.

4 Press the MANUAL SELECT (TEST) button again to stop the noise signal.

NOTE

If the surround speakers level of the SURROUND is changed, that of the DOLBY PRO LOGIC is also changed.

About the channels

The left and right speakers create the stereo effect.

The center speaker helps achieve precise sound positioning over a broad sound field.

The rear-mounted surround speakers enhance the "depth" of the sound field.

To change the delay time

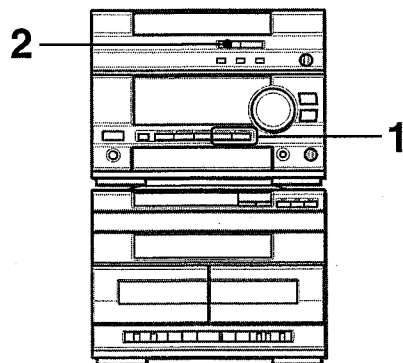
The surround speakers reproduce sounds a split second after the front speakers. The delay is initially set to 20 ms (milliseconds).

To change this standard delay time, press the MANUAL SELECT (TEST) button on the remote control repeatedly until "TIME" is displayed. Then, press the ◀◀ DOWN or UP ▶▶ button. Each time one of the buttons is pressed, the delay time changes as shown below.

15mS ↔ 20mS ↔ 30mS



PLAY WITH DOLBY PRO LOGIC



1 Press the VIDEO 2/AUX button and start playback of the video source

2 Press the DOLBY PRO LOGIC button.

NORMAL is selected, and the playback sound has the DOLBY PRO LOGIC effect.



To cancel DOLBY PRO LOGIC mode

Press the DOLBY PRO LOGIC button repeatedly until "P-off" is displayed.

To change the sound levels during playback

After adjusting the balance with the noise sequencer, the sound levels of the center or surround speakers can be adjusted during playback of laser discs or video software.

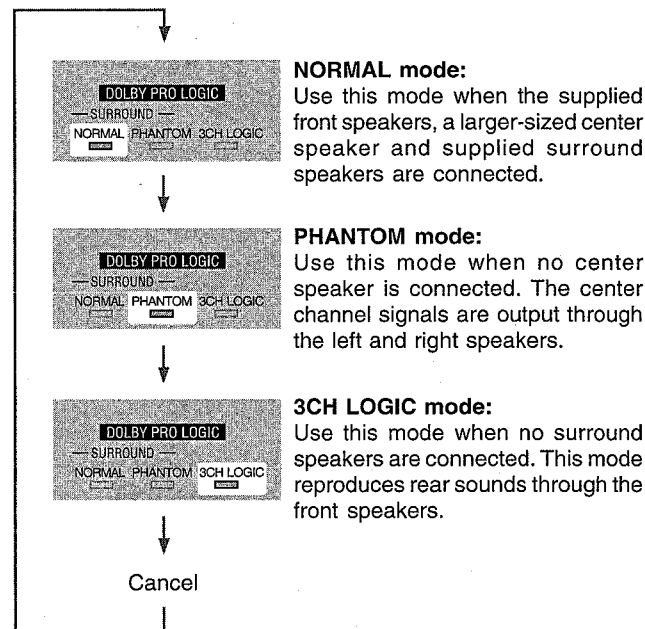
- 1** Press the MANUAL SELECT (TEST) button on the remote control repeatedly to select "CEN" (center) or "SUR" (surround).
- 2** While the "CEN" or "SUR" is displayed, press the ◀◀ DOWN or UP ▶▶ button on the remote control to adjust the volume.

ADDITIONAL DOLBY PRO LOGIC MODES

In addition to the NORMAL mode, this unit is also equipped with the PHANTOM and the 3 CH LOGIC modes.

To select PHANTOM or 3CH LOGIC

Press the DOLBY PRO LOGIC button repeatedly until the desired Dolby Pro Logic mode is displayed. The Dolby Pro Logic mode is displayed cyclically as follows.



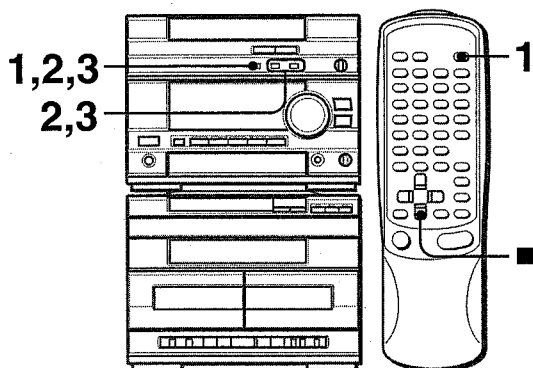
To adjust the balance of connected speaker sound levels

Carry out step 2 to 4 on page 21.

NOTE

- Depending on the sound source and/or listening conditions, a surround effect may not be obtained even when the DOLBY PRO LOGIC is on.
- BBE, DSP, and the vocal fader are automatically canceled when the DOLBY PRO LOGIC is selected.
- The DOLBY PRO LOGIC is automatically canceled when any of the DSP, BBE, or vocal fader effects are selected.
- The DOLBY PRO LOGIC is automatically canceled when headphones are plugged in or there is audio input through a microphone.
- The full DOLBY PRO LOGIC effect cannot be obtained when using software without mark. In this case, use the SURROUND mode instead. (See page 8.)
- The DOLBY PRO LOGIC is automatically canceled when:
 - the MIC or ECHO level is changed.
 - the SURROUND or BBE is turned on.
 - the headphones are plugged in.

SETTING THE CLOCK



- 1 Press the **CLOCK** button on the remote control, and press the **SET** button within 4 seconds.



- 2 Press the **TUNING DOWN** or **UP** button to designate the hour, and press the **SET** button.

The hour stops flashing and the minute starts flashing.

- 3 Press the **TUNING DOWN** or **UP** button to designate the minute, and press the **SET** button.

The minute stops flashing on the display and the clock starts from 00 second.

To display the current time

Press the **CLOCK** button on the remote control. The time is displayed for 4 seconds.

However, the time cannot be displayed during recording.

To switch to the 24-hour standard

Press the **CLOCK** button and then press the **■** button on the remote control within 4 seconds.

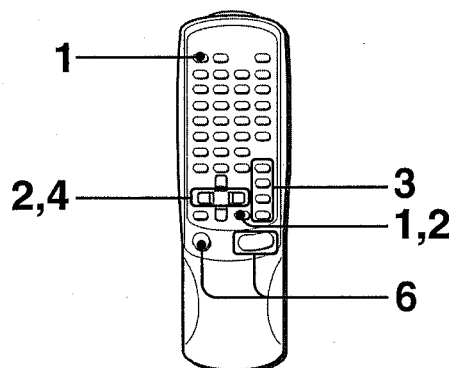
Repeat the same procedure to restore the 12-hour standard.

If the clock display flashes

This is caused by a power interruption. The current time needs to be reset.

If power is interrupted for more than approximately 24 hours, all settings stored in memory after purchase need to be reset.

SETTING THE TIMER



The unit can be turned on at a specified time every day with the built-in timer.

Preparation

Make sure the clock is set correctly.

Use the remote control.

- 1 Press the **TIMER** button once to display , and press the **SET** button within 4 seconds.

 is displayed, and the hour flashes.



NOTE

If you press the **SET** button after 4 seconds, another operation may start.

- 2 Designate the hour of the timer-on time by pressing the **DOWN** or **UP** button, and press the **SET** button. Repeat to designate the minute of the timer-on time.



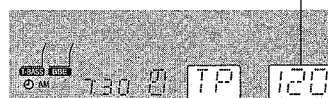
After you designate the timer-on time, one of the source name flashes on the display.

- 3 Press one of the function buttons to select a source, and press the **SET** button.

If the **TUNER** button is pressed, the band cannot be selected in this step.

- 4 Select the duration for the timer-activated period with the **DOWN** or **UP** button, and press the **SET** button.

Timer-activated period



source name

The duration for the timer-activated period can be set between 5 and 240 minutes in 5-minute steps.

5 Prepare the source.

To listen to a CD, load the disc to be played first on tray 1.

To listen to a tape, insert the tape into deck 1 or 2.

To listen to the radio, tune in to a station.

6 Press the POWER button to turn the unit off after adjusting the volume and tone.

⏻ remains on the display after the power is turned off (timer standby mode).



When the timer-on time is reached, the unit turns on and begins play with the selected source.

To check the specified time and source

Press the TIMER button. The timer-on time, the selected source name and the duration for the timer-activated period are displayed for 4 seconds.

To cancel timer standby mode temporarily

Press the TIMER button repeatedly on the remote control so that ⏻ or REC disappears on the display.

To restore the timer standby mode, press again to display ⏻ or REC.

Using the unit while the timer is set

You can use the unit normally after setting the timer.

Before turning off the power, repeat step 5 to prepare the source, and adjust the volume and tone.

NOTE

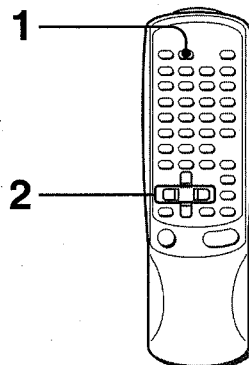
- Timer playback and timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

TIMER RECORDING

Timer recording is applicable for TUNER, VIDEO 1/MD and VIDEO 2/AUX (with an external timer) sources only.

Press the TIMER button twice on the remote control so that REC appears on the display, and press the SET button within 4 seconds. Repeat the steps shown above from step 2 and insert the tape to be recorded into deck 2 after step 5.

SETTING THE SLEEP TIMER



The unit can be turned off automatically at a specified time.

Use the remote control.

1 Press the SLEEP button.



2 Within 4 seconds, press the ◀◀ or ▶▶ button to specify the time until the power is turned off.

Each time the button is pressed, the time changes between 5 and 240 minutes in 5-minute steps.



Specified time

To check the time remaining until the power is turned off
Press the SLEEP button once. The remaining time is displayed for 4 seconds.

To cancel the sleep timer

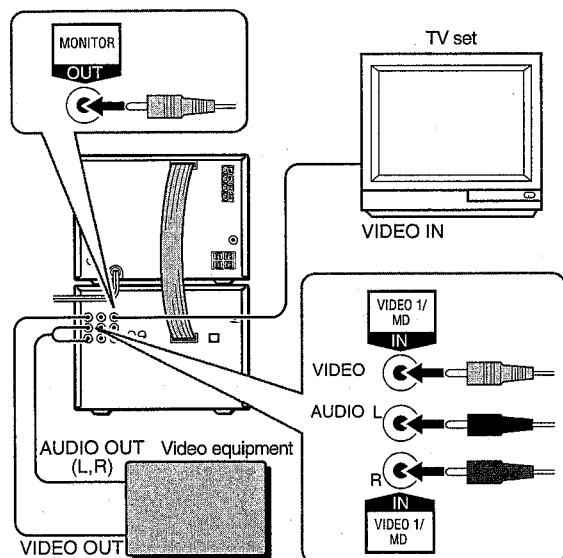
Press the SLEEP button twice so that "SLEEP" on the display disappears.

CONNECTING OPTIONAL EQUIPMENT

Refer to the operating instructions of the connected equipment for details.

- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

TV OR VIDEO EQUIPMENT



Two video units and a TV set for monitoring can be connected to this unit.
Use cables with RCA phono plugs.

Connecting a TV set

Connect to the MONITOR OUT terminal.

You can watch the video playback of either of the connected video units on the TV. Press the VIDEO 1/MD or VIDEO 2/AUX button to select one of the units.

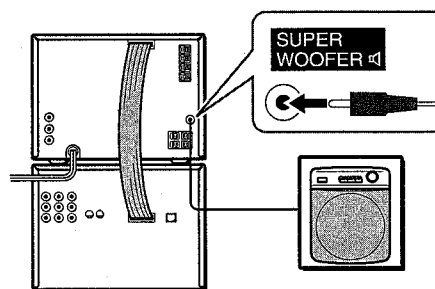
Connecting the video equipment

Connect to the VIDEO 1/MD IN or VIDEO 2/AUX IN terminals.

NOTE

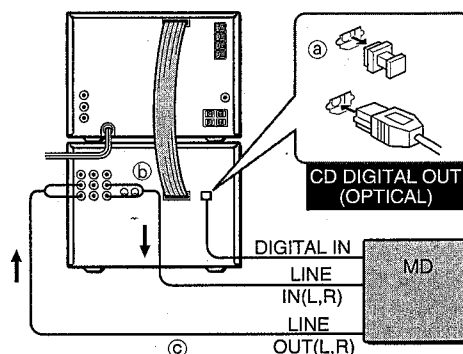
- Audio signals of the equipment connected to the VIDEO 1/MD IN are not output through the REC OUT terminal.
- We recommend that the TV set be placed to the right of the system.

POWERED SUB WOOFER



Connect an optional powered sub woofer with a built-in amplifier to the SUPER WOOFER terminal.

MD RECORDER



Recording on a MD through a digital cord

The unit can output CD digital sound signals through the CD DIGITAL OUT (OPTICAL) connector. Use an optical cable for the connection.

- ① Remove the dust cap from the CD DIGITAL OUT (OPTICAL) connector and connect the optical cable.

Recording on a MD through an analog cord → ②

This unit can output analog sound signals for all functions through the REC OUT (L, R) jacks. Use a cable with RCA phono plugs for the connection.

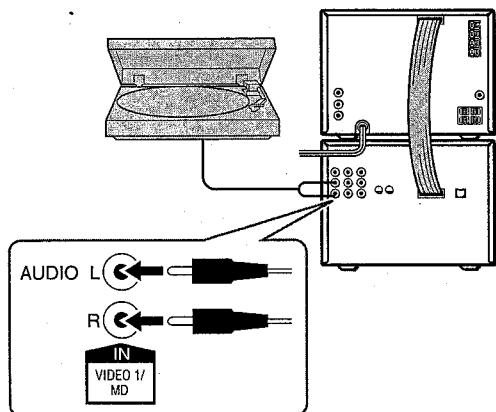
Listening to MD sound with this unit → ③

Connect a cable with RCA phono plugs to VIDEO 1/MD IN (AUDIO L, R).

NOTE

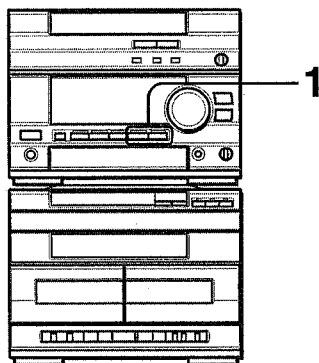
- Do not connect equipment to the REC OUT jacks and VIDEO 2/AUX IN jacks simultaneously. Otherwise, noise is generated and malfunction occurs.
- When the CD DIGITAL OUT (OPTICAL) connector is not being used, attach the supplied dust cap.

TURNTABLE



Use an Aiwa turntable equipped with an equalizer amplifier. Connect the connection cord of the turntable to the VIDEO 1/MD IN (L, R) or VIDEO 2/AUX IN (L, R) jacks.

LISTENING TO EXTERNAL SOURCES



To play equipment connected to the VIDEO 1/MD or VIDEO 2/AUX jacks on the rear panel of the unit, proceed as follows.

Preparation

When playing a video source, turn on the TV set or monitor connected to the MONITOR OUT jack.

- 1 Press the VIDEO 1/MD or VIDEO 2/AUX button.**
VIDEO 1 or VIDEO 2 appears on the display.
- 2 Play the connected equipment.**

To change VIDEO 1/MD or VIDEO 2/AUX source name on the display

When the VIDEO 1/MD button is pressed, "VIDEO 1" is displayed initially. It can be changed to "MD".

With the power off, press the POWER button while pressing the VIDEO 1/MD button.

Repeat the procedure to return to "VIDEO 1".

VIDEO 2/AUX source name can also be changed by following the same procedure.

To select external sources with the remote control

Press the VIDEO/AUX button.

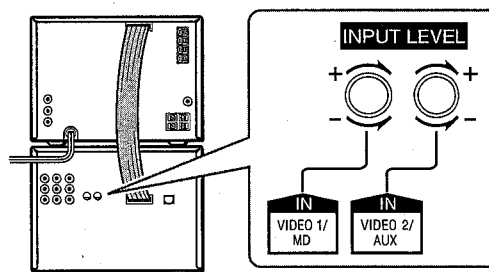
Each time it is pressed, the external source is alternated between the VIDEO 1/MD and the VIDEO 2/AUX.

To adjust the sound level of the external source

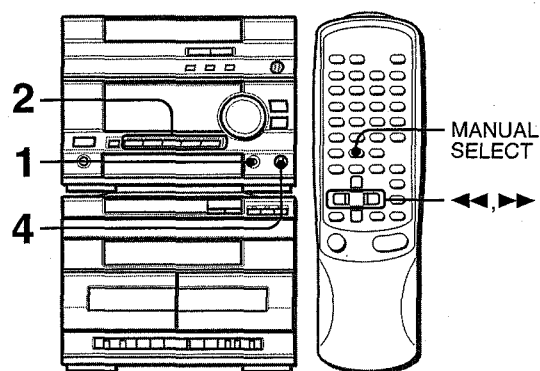
When the sound level of the external source is much higher or much lower than that of other function sources, adjust it as follows.

Example: To adjust the sound level of the equipment connected to the VIDEO 1/MD IN jacks.

- 1** Press the VIDEO 1/MD button and play the equipment.
- 2** Turn the VIDEO 1/MD INPUT LEVEL control until the sound level becomes the same as that of other function sources.



MICROPHONE MIXING



A microphone (not supplied) can be connected to this unit, allowing you to sing along to music sources. Use a microphone with a mini plug ($\varnothing 3.5$ mm, $1/8$ inch).

Before connecting a microphone

Set the MIC MIXING control to MIN.

- 1 Connect your microphone to the MIC jack.
- 2 Press one of the function buttons to select the source to be mixed, and play the source.
- 3 Adjust the volume and tone of the source.
- 4 Adjust the microphone volume with the MIC MIXING control.

To echo the microphone sound

Press the MANUAL SELECT button on the remote control once and then press the $\leftarrow$ or $\rightarrow$ button. The display changes as follows.

MAX (maximum) $\leftrightarrow$ -3 $\leftrightarrow$ -6 -15 $\leftrightarrow$ -18 $\leftrightarrow$ MIN (minimum)



Make sure the DSP and the DOLBY PRO LOGIC are turned off before pressing the MANUAL SELECT button.

To record microphone sound mixed with source sound

Follow the procedure for recording from the sound source (See page 17).

The SYNC DUB button cannot be used for mixing recording.

When not using the microphones

Set the MIC MIXING and the echo volume to MIN and remove the microphones from the MIC jacks.

NOTE

- When there is audio input through a microphone, the SURROUND mode and DOLBY PRO LOGIC are automatically canceled.
- If a microphone is held too near the speakers, a howling sound may be produced. In this case, hold the microphone away from the speakers, or decrease the sound level using the MIC MIXING control.
- If sound through the microphone is extremely loud, it may be distorted. In this case, turn the MIC MIXING control toward MIN.

Recommended microphones

The use of unidirectional type microphones are recommended to prevent howling. Contact your local Aiwa dealer for details.

SPECIFICATIONS

STEREO RECEIVER RX-NMT100

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

AM tuner section

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 μ V/m
Antenna	Loop antenna

Amplifier section

Power output	Front 100 W + 100 W (50 Hz – 20 kHz, THD less than 1%, 6 ohms) Rear (Surround) 10 W + 10 W (1 kHz, THD less than 1%, 16 ohms)
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	Center 20 W (1 kHz, THD less than 1%, 8 ohms)
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Total harmonic distortion	0.1 % (60 W, 1 kHz, 6 ohms)
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Inputs	VIDEO 1/MD IN: 200 mV (adjustable) VIDEO 2/AUX IN: 200 mV (adjustable) MIC 1, MIC 2: 1 mV (10 kohms) REC OUT: 200 mV SUPER WOOFER: 2.4 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 16 ohms or more CENTER SPEAKER: accept speakers of 8 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more
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General

Power requirements	120 V AC, 60 Hz
Power consumption	160 W (System total 180 W)
Dimensions of main unit (W x H x D)	260 x 199 x 333 mm (10 ¹ / ₄ x 7 ⁷ / ₈ x 13 in.)
Weight of main unit	7.5 kg (16 lbs 9 oz.)

COMPACT DISC/STEREO CASSETTE DECK FD-NM100

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	Metal tape: 50 Hz – 17000 Hz CrO ₂ tape: 50 Hz – 16000 Hz Normal tape: 50 Hz – 15000 Hz
Signal-to-noise ratio	75 dB (Dolby C NR ON, Metal tape peak level)
Recording system	AC bias
Heads	Deck 1: Playback head x 1 Deck 2: Recording/playback/erase head x 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual

Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.03 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

General

Dimensions (W x H x D)	260 x 204 x 320 mm (10 ¹ / ₄ x 8 ¹ / ₈ x 12 ⁵ / ₈ in.)
Weight	4 kg (8 lbs 13 oz.)

SPEAKER SYSTEM SX-NMT100

Cabinet type	3 way, bass reflex (magnetic sealed type)
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Speakers

Woofer:	160 mm (5 ⁵ / ₈ in.) cone type
Tweeter:	60 mm (2 in.) cone type
Super tweeter:	20 mm (1 ³ / ₁₆ in.) ceramic type
Impedance	6 ohms

Output sound pressure level	88 dB/W/m
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Dimensions (W x H x D)	250 x 396 x 250 mm (9 ⁷ / ₈ x 15 ⁵ / ₈ x 9 ⁷ / ₈ in.)
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Weight	5.2 kg (11 lbs 7 oz.)
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Specifications and external appearance are subject to change without notice.

BBE SYSTEM

The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE sound, Inc.

DOLBY NR/DOLBY PRO LOGIC

Manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY", the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

COPYRIGHT

Please check the laws on copyright relating to recordings from discs, radio or external tape for the country in which the machine is being used.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Modifications or adjustments to this product, which are not expressly approved by the manufacturer, may void the user's right or authority to operate this product.

CARE AND MAINTENANCE

Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet

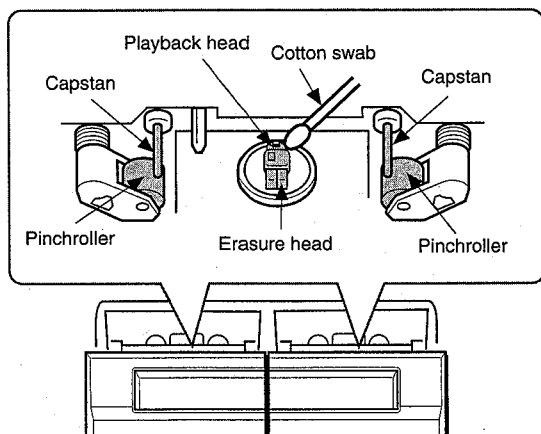
Use a soft and dry cloth.

If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzene or thinner as these could damage the finish of the unit.

To clean the heads and tape paths

After every 10 hours of use, clean the heads and tape paths with a head cleaning cassette or cotton swab moistened with cleaning fluid or denatured alcohol. (These cleaning kits are commercially available.)

When cleaning with a cotton swab, wipe the recording/playback head, erasure head (deck 2 only), capstans, and pinchrollers.



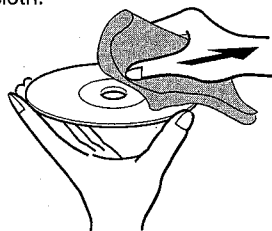
After cleaning the heads and tape paths with a liquid head cleaning cassette or a moistened swab, wait until the cleaned parts are completely dry before inserting the tapes.

To demagnetize the heads

The heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise. After 20 to 30 hours use, demagnetize the heads with any commercially available demagnetizer.

Care of discs

- When a disc becomes dirty, wipe the disc from the center out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes

- Store tapes in their cases after use.
- Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
- Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL

There is no sound.

- Is the AC cord connected properly?
- Is there a bad connection? (→ page 3)
- There may be a short circuit in the speaker terminals.
→ Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?

Sound is emitted from one speaker only.

- Is the other speaker disconnected?

An erroneous display or a malfunction occurs.

- Reset the unit as stated below.

TUNER SECTION

There is constant, wave-like static.

- Is the antenna connected properly? (→ page 3)
- Is the signal weak?
→ Connect an outdoor antenna.

The reception contains noise interferences or the sound is distorted.

- Is the system picking up external noise or multipath distortion?
→ Change the orientation of the antenna.
→ Move the unit away from other electrical appliances.

CASSETTE DECK SECTION

The tape does not run.

- Is deck 2 in pause mode? (→ page 15)

The sound is off-balance or not adequately high.

- Is the playback head dirty? (→ page 29)

Recording is not possible.

- Is the erasure prevention tab on the tape broken off? (→ page 16)
- Is the recording head dirty? (→ page 29)

Erasure is not possible.

- Is the erasure head dirty? (→ page 29)

High frequency sound is not emitted.

- Is a tape recorded without Dolby NR played back with the Dolby NR system operating? (→ page 15)
- Is the recording/playback head dirty? (→ page 29)

CD PLAYER SECTION

The CD player does not play.

- Is the disc correctly inserted? (→ page 11)
- Is the disc dirty? (→ page 29)
- Is the lens affected by condensation?
→ Wait approximately one hour and try again.

To reset

If an unusual condition occurs in the display window or the cassette decks, reset the unit as follows.

- 1 Press the POWER button to turn off the power.
- 2 Press the POWER button to turn the power back on while pressing the DEMO button. Everything stored in memory after purchase is canceled.

If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord, and connect it again. Then repeat step 2.